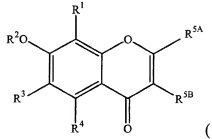
IN THE CLAIMS

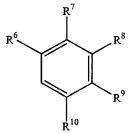
1. (Currently Amended): A method of treating a human in need of cancer treatment, comprising administering a composition comprising greater than 0.5 weight percent of a phytoestrogen based on the total weight of the composition, wherein the phytoestrogen is:

wogonin, its pharmaceutically acceptable esters and salts, or~~and~~ its selectively substituted analogs represented by formula (1)



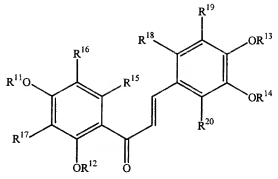
(1)

wherein R^1 is hydrogen, C_1-C_6 alkyl, or C_1-C_6 alkoxy; R^2 is hydrogen, C_1-C_6 alkyl, or C_2-C_6 acyl; R^3 and R^4 are independently hydrogen, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl; one of R^5 or R^6 is hydrogen, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl, wherein the other of R^{5A} or R^{5B} is



wherein R^7-R^{11} are independently hydrogen, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl; and wherein at least four of R^3-R^{11} are hydrogen;

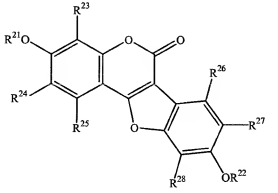
isoliquiritigenin, its pharmaceutically acceptable esters and salts, or~~and~~ its selectively substituted analogs represented by the formula (2)



(2)

wherein R^{11}-R^{14} are independently hydrogen or C_1-C_6 alkyl; R^{15}-R^{20} are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl, wherein at least three of R^{15}-R^{20} are hydrogen;

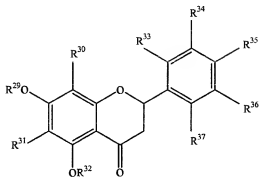
coumestrol, its pharmaceutically acceptable esters and salts, or~~and~~ its selectively substituted analogs represented by the formula (3)



(3)

wherein R^{21} and R^{22} are independently hydrogen or C_1-C_6 alkyl; and R^{23}-R^{28} are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl, wherein at least three of R^{23}-R^{28} are hydrogen;

a prenyl isoflavonoid represented by formula (4)



(4)

wherein R^{30} and $\underline{R^{31}}R^{31}$ are independently hydrogen or 3-methyl-2-butenyl, with the proviso that at least one of R^{31} and ~~R^{33}~~ is 3-methyl-2-butenyl; R^{29} and R^{32} are independently hydrogen or C_1-C_6 alkyl; and R^{33}-R^{37} are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl; and wherein at least two of R^{33}-R^{37} are hydrogen;

or a combination comprising one or more of the foregoing phytoestrogens.

2. (Original): The method of Claim 1, wherein the cancer is prostate cancer, breast cancer, endometrial cancer, colon cancer, lung cancer, bladder cancer, testicular cancer, ovarian cancer, thyroid cancer, or bone cancer.

3. (Original): The method of Claim 1, wherein the phytoestrogen is wogonin, a pharmaceutically acceptable salt or ester of wogonin, a selectively substituted analog of wogonin, or a combination comprising one or more of the foregoing compounds..

4. (Withdrawn): The method of Claim 3, wherein the selectively substituted analog is genistein, biochanin, formononetin, prunetin, scutellarein, daidzin, luteolin, apigenin, acacetin, 3,6,4-trihydoxylflavone, 7,3-dihydroxy-4,1-dimethoxy-isoflavone, 3R-2',3'-dihydoxy-7,4-dimethoxy-isoflavone, or a combination comprising one or more of the foregoing compounds.

5. (Original): The method of Claim 3, wherein phytoestrogen is an extract of an herb in the family *Scutellaria.*

6. (Original): The method of Claim 3, wherein treating comprises administering a dosage of about 0.001 mg/kg/day to about 300 mg/kg/day of the wogonin.

7. (Original): The method of Claim 3, wherein the composition further comprises isoliquiritigenin, coumestrol, or a combination of one or more of the foregoing compounds.

8. (Withdrawn): The method of Claim 1, wherein the phytoestrogen is isoliquiritigenin, a pharmaceutically acceptable salt or ester of isoliquiritigenin, a selectively substituted analog of isoliquiritigenin, or a combination comprising one or more of the foregoing compounds.

9. (Withdrawn): The method of Claim 8, wherein the phytoestrogen is phloretin, 4,2,4'-trihydroxychalcone, or a combination comprising one or more of the forgoing compounds.

10. (Withdrawn): The method of Claim 8, wherein the phytoestrogen is an extract of *Glycyrrhiza uralensis*, *Glycyrrhiza glabra*, or a combination comprising one or more of the foregoing plant extracts.

11. (Withdrawn): The method of Claim 8, wherein the composition further comprises wogonin, coumestrol, or a combination of one or more of the foregoing compounds.

12. (Withdrawn): The method of Claim 8, wherein treating comprises administering a dosage of about 0.001 mg/kg/day to about 300 mg/kg/day of isoliquiritigenin.

13. (Withdrawn): The method of Claim 1, wherein the phytoestrogen is coumestrol, a pharmaceutically acceptable salt or ester of coumestrol, a selectively substituted analog of coumestrol, or a combination comprising one or more of the foregoing compounds.

14. (Withdrawn): The method of Claim 13, wherein the phytoetrogen is an extract of *Taraxacum mongolicum*, *Medicago sativa*, *Brassica oleracea*, or *Eclipta prostrata*, or a combination comprising one or more of the foregoing plant extracts.

15. (Withdrawn): The method of Claim 13, wherein the composition further comprises wogonin, isoliquiritigenin, or a combination of one or more of the foregoing compounds.

16. (Withdrawn): The method of Claim 13, wherein treating comprises administering a dosage of about 0.001 mg/kg/day to about 300 mg/kg/day of coumestrol.

17. (Withdrawn): The method of Claim 1, wherein the phytoestrogen is a prenyl flavoniod.

18. (Original): he method of Claim 1, wherein the composition further comprises an anti-cancer agent.

19. (Original): The method of Claim 18, wherein the anti-cancer agent is oridonin, indirubin, taxol, cis-platin, camptothecan, vincristine, monocrotaline, Maytansine, homoharringtonine, colchicine, irisquinone A, irisquinone B, irisquinone C, acronycine, matrin, oxymatrin, curcumin, paricine, pariphyllin, or a combination comprising one or more of the foregoing anti-cancer agents.

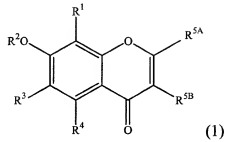
20. (Original): The method of Claim 19, wherein the composition further comprises an immune stimulant.

21. (Original): The method of Claim 20, wherein the immune stimulant is a ginsenoside, ferulic acid, mannan, synanthrin, eleutheroside A, eleutheroside B, eleutheroside C, eleutheroside D, eleutheroside E, a gynoside, beta-pachyman, inulin, a glycoprotein, polyfructose, interferons, γ-globulins, an extract of *Ganoderma lucidum*, an extract of *Coriolus versicolor*, an extract of *Poria cocos*, or a combination comprising one or more of the foregoing immune stimulants.

22. (Original): A method of treating a human in need of cancer treatment, comprising administering a composition comprising a phytoestrogen, an anti-cancer agent, and an immune stimulant, wherein the phytoestrogen is present in an amount of greater than 0.5 weight percent based on the total weight of the composition.

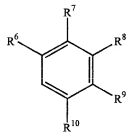
23. (Currently Amended): The method of Claim 22, wherein the phytoestrogen is:

wogonin, its pharmaceutically acceptable esters and salts, or~~and~~ its selectively substituted analogs represented by formula (1)



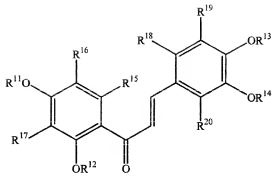
(1)

wherein R^1 is hydrogen, C_1-C_6 alkyl, or C_1-C_6 alkoxy; R^2 is hydrogen, C_1-C_6 alkyl, or C_2-C_6 acyl; R^3 and R^4 are independently hydrogen, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl; one of R^5 or R^6 is hydrogen, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl, wherein the other of R^{5A} or R^{5B} is



wherein R^7-R^{11} are independently hydrogen, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl; and wherein at least four of R^3-R^{11} are hydrogen;

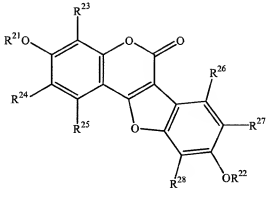
isoliquiritigenin, its pharmaceutically acceptable esters and salts, or~~and~~ its selectively substituted analogs represented by the formula (2)



(2)

wherein R^{11}-R^{14} are independently hydrogen or C_1-C_6 alkyl; R^{15}-R^{20} are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl, wherein at least three of R^{15}-R^{20} are hydrogen;

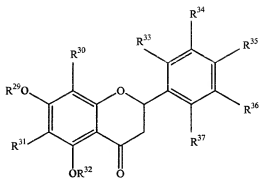
coumestrol, its pharmaceutically acceptable esters and salts, or~~and~~ its selectively substituted analogs represented by the formula (3)



(3)

wherein R^{21} and R^{22} are independently hydrogen or C_1-C_6 alkyl; and R^{23}-R^{28} are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl, wherein at least three of R^{23}-R^{28} are hydrogen;

a prenyl isoflavonoid represented by formula (4)



(4)

wherein R^{30} and R^{31} are independently hydrogen or 3-methyl-2-butenyl, with the proviso that at least one of R^{31} and ~~$R^{31}R^{33}$~~ is 3-methyl-2-butenyl; R^{29} and R^{32} are independently hydrogen or C_1-C_6 alkyl; and R^{33}-R^{37} are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl; and wherein at least two of R^{33}-R^{37} are hydrogen;

or a combination comprising one or more of the foregoing phytoestrogens.

24. (Original): The method of Claim 22, wherein the phytoestrogen is wogonin, a pharmaceutically acceptable salt or ester of wogonin, a selectively substituted analog of wogonin, or a combination comprising one or more of the foregoing compounds.

25. (Withdrawn): The method of Claim 22, wherein the selectively substituted analog is genistein, biochanin, 6-prenylnaringenin, 8- prenylnaringenin, 6,8-diprenylnaringenin, formononetin, prunetin, scutellarein, daidzin, luteolin, apigenin, acacetin, 3,6,4-trihydoxylflavone, 7,3-dihydroxy-4,1-dimethoxy-isoflavone, 3R-2',3'-dihydoxy-7,4-dimethoxy-isoflavone, or a combination comprising one or more of the foregoing compounds.

26. (Original): The method of Claim 22, wherein the anti-cancer agent is oridonin, indirubin, taxol, cis-platin, camptothecan, vincristine, monocrotaline, Maytansine, homoharringtonine, colchicine, irisquinone A, irisquinone B, irisquinone C, acronycine, matrin, oxymatrin, curcumin, paricine, pariphyllin, or a combination comprising one or more of the foregoing anti-cancer agents.

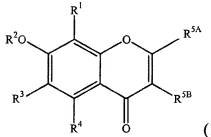
27. (Original): The method of Claim 22, wherein the immune stimulant a ginsenoside, ferulic acid, mannan, synanthrin, eleutheroside A, eleutheroside B, eleutheroside C, eleutheroside D, eleutheroside E, gynoside, beta-pachyman, inulin, glycoproteins, polyfructose, interferons, γ-globulins, an extract of *Ganoderma lucidum*, an extract of *Coriolus versicolor*, an extracts of *Poria cocos*, or a combination comprising one or more of the foregoing immune stimulants.

28. (Original): The method of Claim 22, wherein the immune stimulant a ginsenoside, ferulic acid, mannan, synanthrin, eleutheroside A, eleutheroside B, eleutheroside C, eleutheroside D, eleutheroside E, gynoside, beta-pachyman, inulin, glycoproteins, polyfructose, interferons, γ-globulins, or a combination comprising one or more of the foregoing immune stimulants.

29. (Original): A composition, comprising:

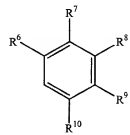
greater than or equal to about 0.5 weight percent of a phytoestrogen based on the total weight of the composition and at least one anti-cancer agent, wherein the phytoestrogen is:

wogonin, its pharmaceutically acceptable esters and salts, ~~or~~and its selectively substituted analogs represented by formula (1)



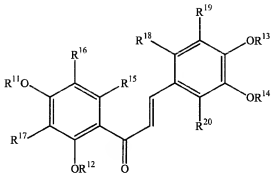
(1)

wherein R^1 is hydrogen, C_1-C_6 alkyl, or C_1-C_6 alkoxy; R^2 is hydrogen, C_1-C_6 alkyl, or C_2-C_6 acyl; R^3 and R^4 are independently hydrogen, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl; one of R^5 or R^6 is hydrogen, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl, wherein the other of R^{5A} or R^{5B} is



wherein R^7-R^{11} are independently hydrogen, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl; and wherein at least four of R^3-R^{11} are hydrogen;

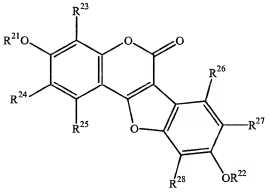
isoliquiritigenin, its pharmaceutically acceptable esters and salts, orand its selectively substituted analogs represented by the formula (2)



(2)

wherein R^{11}-R^{14} are independently hydrogen or C_1-C_6 alkyl; R^{15}-R^{20} are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl, wherein at least three of R^{15}-R^{20} are hydrogen;

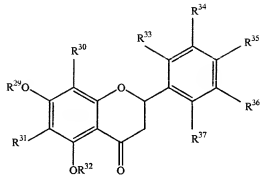
coumestrol, its pharmaceutically acceptable esters and salts, orand its selectively substituted analogs represented by the formula (3)



(3)

wherein R^{21} and R^{22} are independently hydrogen or C_1-C_6 alkyl; and R^{23}-R^{28} are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl, wherein at least three of R^{23}-R^{28} are hydrogen;

a prenyl isoflavonoid represented by formula (4)



(4)

wherein R^{30} and R^{31} are independently hydrogen or 3-methyl-2-butenyl, with the proviso that at least one of R^{31} and R^{31}-~~R^{33}~~ is 3-methyl-2-butenyl; R^{29} and R^{32} are independently hydrogen or C_1-C_6 alkyl; and R^{33}-R^{37} are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, or C_2-C_6 acyl; and wherein at least two of R^{33}-R^{37} are hydrogen;

or a combination comprising one or more of the foregoing phytoestrogens.[.]

30. (Original): The composition of Claim 29, wherein the phytoestrogen is wogonin, a pharmaceutically acceptable salt or ester of wogonin, a selectively substituted analog of wogonin, or a combination comprising one or more of the foregoing compounds.

31. (Withdrawn): The composition of Claim 30, wherein the selectively substituted analog is genistein, biochanin, 6-prenylnaringenin, 8- prenylnaringenin, 6,8-diprenylnaringenin, formononetin, prunetin, scutellarein, daidzin, luteolin, apigenin, acacetin, 3,6,4-trihydoxylflavone, 7,3-dihydroxy-4,1-dimethoxy-isoflavone, 3R-2',3'-dihydoxy-7,4-dimethoxy-isoflavone, or a combination comprising one or more of the foregoing compounds.

32. (Original): The composition of Claim 29, wherein the anti-cancer agent is oridonin, indirubin, taxol, cis-platin, camptothecan, vincristine, monocrotaline, Maytansine, homoharringtonine, colchicine, irisquinone A, irisquinone B, irisquinone C, acronycine, matrin, oxymatrin, curcumin, paricine, pariphyllin, or a combination comprising one or more of the foregoing anti-cancer agents.

33. (Original): The composition of Claim 29, wherein the anti-cancer agent is an extract of Rabdosia rubescens; and an extract of a plant selected from the group consisting of Panax pseudo-ginseng Wall, Ganoderma lucidum Karst, Scutellaria baicalensis Georgi, Glycine max, Curcuma longa, and combinations comprising one or more of the foregoing plant extracts.

34. (Original): The composition of Claim 29, further comprising an immune stimulant.

35. (Original): The composition of Claim 35, wherein the immune stimulant is a ginsenoside, ferulic acid, mannan, synanthrin, eleutheroside A, eleutheroside B, eleutheroside C, eleutheroside D, eleutheroside E, gynoside, beta-pachyman, inulin, glycoproteins, polyfructose, interferons, γ-globulins, an extracts of *Ganoderma lucidum*, an extract of *Coriolus versicolor*, an extracts of *Poria cocos*, or a combination comprising one or more of the foregoing immune stimulants.

36. (Original): A composition, comprising:

greater than or equal to about 0.5 weight percent of a phytoestrogen based on the total weight of the composition;

an anti-cancer agent; and

an immune stimulant.

37. (Withdrawn): The composition of Claim 38, wherein the phytoestrogen is a selectively substituted analog of wogonin comprising genistein, biochanin, 6-prenylnaringenin, 8- prenylnaringenin, 6,8-diprenylnaringenin, formononetin, prunetin, scutellarein, daidzin, luteolin, apigenin, acacetin, 3,6,4-trihydoxylflavone, 7,3-dihydroxy-4,1-dimethoxy-isoflavone, 3R-2',3'-dihydoxy-7,4-dimethoxy-isoflavone, or a combination comprising one or more of the foregoing compounds.

38. (Original): The composition of Claim 37, wherein the anti-cancer agent is oridonin, indirubin, taxol, cis-platin, camptothecan, vincristine, monocrotaline, Maytansine, homoharringtonine, colchicine, irisquinone A, irisquinone B, irisquinone C, acronycine, matrin, oxymatrin, curcumin, paricine, pariphyllin, or a combination comprising one or more of the foregoing anti-cancer agents.

39. (Original): The composition of Claim 37, wherein the immune stimulant is a ginsenoside, ferulic acid, mannan, synanthrin, eleutheroside A, eleutheroside B, eleutheroside C, eleutheroside D, eleutheroside E, gynoside, beta-pachyman, inulin, glycoproteins, interferones, γ-globulins, an extract of *Ganoderma lucidum*, an extract of *Coriolus versicolor*, extracts of *Poria cocos*, or a combination comprising one or more of the foregoing immune stimulants.

40. (Withdrawn): A method of treating a human in need of treatment for an estrogen-related disorder, comprising administering a composition comprising wogonin, its pharmaceutically acceptable salts and esters, or a combination of one or more of the foregoing compounds.

41. (Withdrawn): The method of Claim 42, wherein the estrogen-related disorder is bone loss, bone fractures, osteoporosis, glucocorticoid induced osteoporosis, Paget's disease, abnormally increased bone turnover, periodontal disease, tooth loss, rheumatoid arthritis, osteoarthritis, periprosthetic osteolysis, osteogenesis imperfecta, metastatic bone disease, hypercalcemia of malignancy, cartilage degeneration, endometriosis, uterine fibroid disease, hot flashes, cardiovascular disease, impairment of cognitive function, cerebral degenerative disorders, restenosis, gynecomastia, vascular smooth muscle cell proliferation, obesity, incontinence, the symptoms of menopause, or a combination comprising one or more of the foregoing disorders.

42. (Withdrawn): The method of Claim 42, wherein treating comprises administering a dosage of about 0.01 mg/kg/day to about 600 mg/kg/day of wogonin.

43. (Withdrawn): The method of Claim 42, wherein the composition further comprises isoliquiritigenin, coumestrol, or a combination of one or more of the foregoing compounds.

44. (New) The method of claim 2, wherein the cancer is taxol-resistant ovarian cancer.

45. (New) The method of claim 22, wherein the cancer is taxol-resistant ovarian cancer.